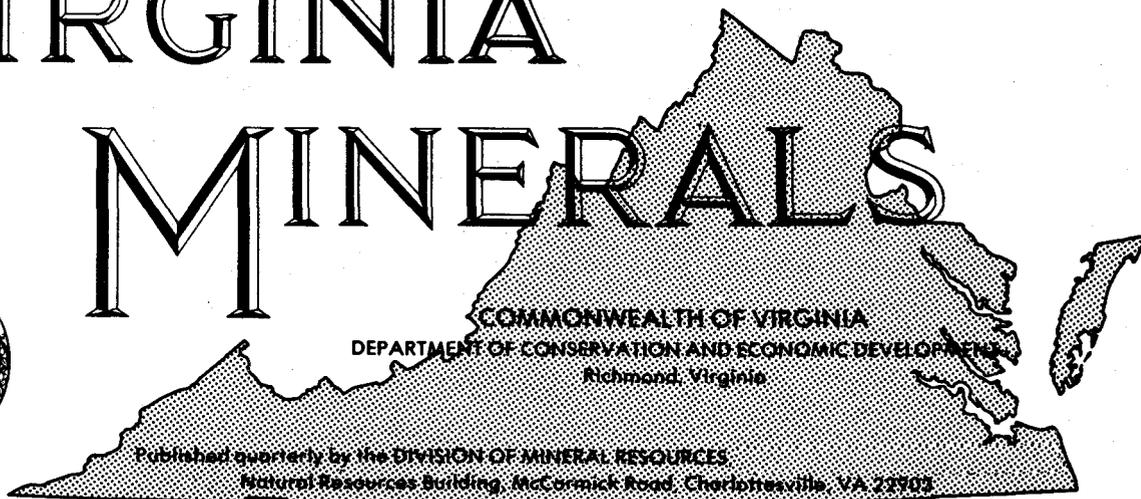


VIRGINIA

MINERALS



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No. 2

GEOLOGIC RESEARCH IN VIRGINIA

A survey of current geologic investigations in Virginia conducted in spring 1980 is compiled below. The tabulated data include titles, types of geologic research, investigators, and contact addresses. The projects were grouped into two categories based on reported aerial extent: regional projects and projects involving county or quadrangle areas. Only locations of quadrangle projects are indicated on the index map. If there are additional entries for the project list, please advise the Division. A key to abbreviations and numbers follows the listings. Additional project information can be obtained from the researcher.

REGIONAL PROJECTS EAST OF BLUE RIDGE

PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Yorktown fossil catalog	13	Campbell	DMR	IP
Stratigraphy & structure SW piedmont	16, 17	Conley	DMR	80
Geophysical characteristics Culpeper Richmond Basins	8	Johnson	DMR	80
Aeroradiometric survey south-central Piedmont	8	Johnson	DMR	80
Geophysical characteristics Danville Basin & area	8, 10	Johnson	DMR	81
COSUNA Report Coastal Plain	16	Rader	DMR	IP
Coastal Plain stratigraphy	16	Rader & Berquist	DMR	IP
Clay resources	12	Sweet	DMR	81
Gold mines & prospects	12	Sweet	DMR	C
Farmville coal basin	12	Wilkes	DMR	C
Radiometric survey of Triassic rocks of Northern Va. using thermoluminescence radiation dosimetry.	3, 5, 6, 8, 12,	Seigel & Lindholm	GW	81
Basement configurations SE Virginia	1, 8, 10, 17	Sabet	OD	81
Chesapeake Bay earth science study	6	Staff	M	81

PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Inner Coastal Plain tectonics mid-Atlantic states	10, 16, 17	Mixon	USGS-G	83
Cenozoic stratigraphy and structure Tidewater	5, 12, 16, 17	Newell	USGS-G	83
Regional aquifer system analysis (RASA)	1, 6, 9	Harsh	USGS-W	84
Land subsidence investigation southeastern Virginia Coastal Plain	1, 9, 16	Hopkins	USGS-W	81
Quaternary map Coastal Plain	2	Johnson	W/M	80
Geology selected field locations	2	Johnson	W/M	80
Stratigraphy Coastal Plain	10	Johnson	W/M	81
Coastal Plain salt water	1, 6, 9	Larson	USGS-W	80
Hydrology of the Culpeper Basin	1, 6, 9	Zenone	USGS-W	81
Geomorphic evolution Va. Piedmont	5, 6, 7, 10	Dunford-Jackson	VA	81
Blockfields Shenandoah Park	5, 7, 10	Hudson	VA	80
Fourier grain shape analysis Chesapeake Bay	1, 5	Boon	VIMS	81
Sediments and sediment budget lower Chesapeake Bay	5, 6, 7, 10, "	Byrne & Hobbs	VIMS	80
Small tidal inlets Chesapeake Bay	4, 5, 7, 9	Byrne	VIMS	IP
Seasat data Chesapeake Bay	15	Munday	VIMS	IP
Fluid muds in Chesapeake Bay	4, 5, 6, 9	Nichols	VIMS	80
Cordierites	6, 11, 14	Armbruster	VPI	81
Thermal conductivity of Coastal Plain sediments	1, 3, 8, 16	Lambiase	VPI	80
Dinoflagellate studies, N. J. to Ala.	2, 5, 13, 16	McLean	VPI	IP

WEST OF BLUE RIDGE

PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Brallier	3, 13, 14, 16	Ludegard & Samuels	A	IP
Keyser Formation stromatoporoids northern Valley	13, 16	Stock	A	IP
Lee County fracture trace	15, 17	Gathright	DMR	C
Coal sampling & analysis	1, 3	Henderson	DMR	IP
Karst mapping	7	Hubbard	DMR	IP
COSUNA Report Valley & Ridge	16	Rader	DMR	80
Fluvial systems Massanutten sandstone	16	Fichter & Dotson	JM	80
Hydrologic modeling Shenandoah River Valley	5, 9	Sauvier	JM	IP
Post-Martinsburg Ordovician stratigraphy	16	Diecchio	NC	80
Subsidence in karst terranes, northern Valley	4, 5, 16	Davies	USGS-G	84

PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Thrust fault deformation and hydrocarbon entrapment	3, 8, 17	Harris	USGS-G	IP
Stratigraphy and structural studies of Devonian black shales in Appalachian Basin	3, 16, 17	Roen & Harris	USGS-G	IP
Hydrologic interactions between the ground-water and surface-water systems in coal mining areas of southwest Va.	6, 9	Hopkins	USGS-W	83
Geochemical modeling of process controlling mine drainage in southwest Va.	1, 6, 9	Hufschmidt	USGS-W	83
Echinodermata, Benbolt Fm	13, 16	Broadhead	T	84
Blockfields Shenandoah Park	5, 7, 10	Hudson	VA	80
Sedimentology Stonehenge Chepultepec Formations	14, 16	Bova & Read	VPI	80
Cleavage development SW VA	17	Gray	VPI	82
Cementation patterns Middle Ordovician ramp to basin facies	14, 16	Grover	VPI	80
Stratigraphy and paleoecology Bluefield Formation	13, 16	Humphreville	VPI	81
Stratigraphy Martinsburg for SW Va	14, 16	Kreisa	VPI	80
Sedimentology Conococheague - Elbrook Formations SW Va	16	Koerchner & Read	VPI	80
Stratigraphy Hampshire Formation	14, 16	McClung	VPI	80
Sedimentology and development Knox unconformity	14, 16	Mussman & Read	VPI	80
Middle Ordovician ramp to basin facies	14, 6	Read	VPI	80
Evolution Cambro-Ordovician shelf	14, 16	Read	VPI	81
Community paleoecology Martinsburg Formation, SW Va	13, 16	Springer	VPI	81

OTHER PROJECTS

PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Geology of the Roanoke 1:250,000 scale map	10	Conley	DMR	84
Geophysical characteristics of Blue Ridge	8	Johnson	DMR	IP
Metallic mines and prospects, Blue Ridge	10	Sweet	DMR	C
Virginia water-use data system	1, 9	Hopkins	USGS-W	IP
Planning study for the investigation of low-flow characteristics of Virginia streams	1, 5, 9	Prugh	USGS-W	80
Water quality & health	5, 6, 9	Hornberger	VA	81
Quantitative classification of Va. soils	5, 6, 7	Lent	VA	80
Study of some minerals	11	Mitchell	VA	81
Sorted patterned ground	7	Clark	T	80

PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Debris slides in Appalachians	7, 15	Clark	T	81
Volatile molecules in channel structures	6, 11, 14	Armbruster	VPI	81
Refined optical measurements of minerals	11, 12, 14	Bloss	VPI	90
Community paleoecology	13	Bambach	VPI	81
Paleographic reconstruction & paleobiogeography	13	Bambach	VPI	83
Seismicity of Va.	1, 4, 5, 8, 17	Bollinger	VPI	IP
Gold in Virginia	6, 11, 12, 14	Craig	VPI	IP
U. S. oil and gas field reserves and geologic factors	3	Greender	VPI	IP
Analysis and modeling of energy supplies	2, 3	Greender & Rapoport	VPI	IP
Seismicity studies	8	Snoke	VPI	81
X-ray study minerals bonding with transition metals	11	Ribbe	VPI	85
Conversion kaolin to mullite	6, 11	Ribbe & Nakajima	VPI	82
Eustacy, paleoclimate	13, 16	McLean	VPI	IP

**PROJECTS BASED ON COUNTY OR
QUADRANGLE BOUNDARIES**

COUNTY

Projects that extend into adjoining counties are indicated *

COUNTY AND PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Accomac				
Structural control meanders Coastal Plain rivers	7, 10, 15, 17	Drake	OD	81
Allegheny				
Stratigraphy of black shale in Tuscarora Sandstone*	3, 16	Diecchio	NC	IP
Stratigraphy & paleontology Upper Chemung & Hampshire Fms.	13, 16	McDonnell	NC	80
Stratigraphy Devonian Chemung-Brallier contact*	13, 14, 16	Lyke	NC	80
Silica Resources*	12, 14	Wilkes	DMR	80
Amelia				
Richmond coal basin*	13, 16	Wilkes	DMR	80

COUNTY AND PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Amherst				
Weathering and Thorium migration in Allanite-Monzonite bearing pegmatite	5, 6, 11, 14	Meintzer	VA	80
Augusta				
Trace metal adsorption by MnFe oxide coatings on stream pebbles with their use in mineral exploration*	6, 12	Robinson	JM	81
Silica Resources*	12, 14	Sweet	DMR	C
Bath				
Stratigraphy of black shale in Tuscarora Sandstone*	3, 16	Diecchio	NC	IP
Stratigraphy Devonian Chemung-Brallier contact*	13, 14, 16	Lyke	NC	80
Stratigraphy & paleontology of Upper Chemung & Hampshire fms*	13, 16	McDonnell	NC	80
Silica resources*	12, 14	Sweet	DMR	C
Bland				
Analysis of dome & basin structure*	17	Armstrong	VPI	81
Botetourt				
Regional structure*	10, 17	Bick	W/M	IP
Stratigraphy of black shale in Tuscarora Sandstone*	3, 16	Diecchio	NC	IP
Stratigraphy & paleontology of Upper Chemung & Hampshire fms*	13, 16	McDonnell	NC	80
Silica resources*	12, 14	Wilkes	DMR	IP
Buckingham				
Geochemistry volcanogenic deposits*	5, 6, 7, 9, 12	Good	DMR	IP
Caroline				
Taylorville Triassic basin*	16	Weems	DMR	C
Carroll				
Appalachian massive sulfides*	11, 12, 14, 16, 17	Gair	USGS-G	IP
Environmental monitoring Gossan Lead	5, 6, 9	Good	DMR	C
Charles City				
Identification of subsurface Triassic*	6, 11, 14, 16	Shomo	NC	80
Chesapeake				
Stratigraphy & paleoecology of the marine Pleistocene of SE Va*	13, 16	Spencer	OD	80

TYPE OF RESEARCH

RESEARCHER

ADDRESS

STATUS

Chesterfield

Identification of subsurface Triassic*	6, 11, 14, 16	Shomo	NC	80
Richmond coal basin*	3	Wilkes	DMR	80

Craig

Computer analysis terrain*	5, 7	Greender	VPI	IP
Geochemistry stream sediments	11, 12	Halladay	DMR	80
Stratigraphy & paleontology of Upper Chemung & Hampshire fms*	13, 16	McDonnell	NC	80
Silica resources*	12, 14	Wilkes	DMR	IP

Culpeper

Environmental geology & hydrology Culpeper Basin*	4, 5, 9	Froelich	USGS-G	81
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Dickenson

Stratigraphy & paleontology Wildcat Valley Sandstone*	13, 14, 16	Kier	NC	81
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Dinwiddie

Identification of subsurface Triassic*	6, 11, 14, 16	Shomo	NC	80
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Fairfax

Environmental geology & hydrology Culpeper Basin*	4, 5, 9	Froelich	USGS-G	81
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Fauquier

Environmental geology & hydrology Culpeper Basin*	4, 5, 9	Froelich	USGS-G	81
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Fluvanna

Geochemistry stream sediments	6	Good & Fordham	DMR	C
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Frederick

Devonian Clearville siltstone stratigraphy & sedimentology*	16	Jolley	NC	80
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Giles

Quaternary stratigraphy & bedrock structural framework	8, 16, 17	McDowell	USGS-G	81
Deformation within Martinsburg Fm*	17	Mullenax	VPI	81

Goochland

Geochemistry stream sediments	6	Good & Fordham	DMR	C
Richmond coal basin*	3	Wilkes	DMR	80

Grayson

Environmental monitoring Gossan Lead	5, 6, 9	Good	DMR	C
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PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Green				
Catastrophic flooding of Rappahannock River Basin*	7, 9	Whittecar	OD	82
Hanover				
Identification of subsurface Triassic*	6, 11, 14, 16	Shomo	NC	80
Taylorville Triassic basin*	16	Weems	DMR	C
Henrico				
Identification of subsurface Triassic*	6, 11, 14, 16	Shomo	NC	80
Richmond coal basin*	3	Wilkes	DMR	80
Highland				
Stratigraphy of black shale in Tuscarora Sandstone*	3, 16	Diecchio	NC	IP
Stratigraphy Devonian Chemung-Brallier contact*	13, 14, 16	Lyke	NC	80
Silica resources*	12, 14	Sweet	DMR	C
James City				
Cementation & diagenesis Yorktown Fm*	14	Benedict	W/M	81
Mineralogy and Ti content local clays for pottery analysis*	6, 11	Clement	W/M	81
Habitat development field investigations James River *	5, 6	Darby	OD	IP
Lee				
Stratigraphy & paleontology Wildcat Valley Sandstone*	13, 14, 16	Kier	NC	81
Possible paleoenvironmental equivalence of correlative lower Silurian rocks of North-eastern Tenn and SW Va *	16	Wagner	C	81
Loudoun				
Environmental geology & hydrology Culpeper Basin*	4, 5, 9	Froelich	USGS-G	81
Louisa				
Appalachian massive sulfides *	11, 12, 14, 16, 17	Gair	USGS-G	IP
Geochemistry volcanogenic deposits *	5, 6, 7, 9, 12	Good	DMR	IP
Madison				
Catastrophic flooding of Rappahannock River Basin *	7, 9	Whittecar	OD	82
Nelson				
Rockfish granodiorite geochronology	11, 14	Mose	GM	81
Channel changes from Hurricane Camille	5, 7, 9	Ponton	VA	81

TYPE OF RESEARCH RESEARCHER ADDRESS STATUS

Norfolk

Stratigraphy & paleoecology of the marine Pleistocene of SE Va*	13, 16	Spencer	OD	80
Response of <i>Elphidium excovatum</i> to trace metal content, lower Chesapeake Bay *	5, 6, 13	Spencer	OD	82

Northampton

Structural control meanders Coastal Plain rivers *	7, 10, 15, 17	Drake	OD	81
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Orange

Catastrophic flooding of Rappahannock River Basin *	7, 9	Whittecar	OD	82
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Upper Ordovician Lower Silurian sandstones *	14, 16	Roberts	JM	80
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Powhatan

Richmond coal basin *	3	Wilkes	DMR	80
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Prince George

Identification of subsurface Triassic*	6, 11, 14, 16	Shomo	NC	80
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Prince William

Environmental geology & hydrology Culpeper Basin*	4, 5, 9	Froelich	USGS-G	81
Occoquan pluton geochronology *	11, 14	Mose	GM	80

Roanoke

Silica resources*	12, 14	Wilkes	DMR	IP
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Rockbridge

Regional structure *	10-17	Bick	W/M	IP
Geology & geochemistry of Irish Creek tin district *	6, 10, 12	Good & Hudson	DMR	81
Stratigraphy & paleontology of Upper Chemung & Hampshire fms *	13, 16	McDonnell	NC	80
Silica resources *	12, 14	Sweet	DMR	C

Rockingham

Paleoenvironments of the New Market-Lincolnshire formations	16	Fichter	JM	81
Devonian Clearville Siltstone stratigraphy & sedimentology*	16	Jolley	NC	80
Trace metal adsorption of Mn, Fe, oxide coatings on stream pebbles with their use in mineral exploration	6, 12	Robinson	JM	81

Russell

Stratigraphy & paleontology Wildcat Valley Sandstone*	13, 14, 16	Kier	NC	81
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COUNTY AND PROJECT TITLE	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
Scott				
Stratigraphy & paleontology Wildcat Valley Sandstone*	13, 14, 16	Kier	NC	81
Possible paleoenvironmental equivalence of correlative Lower Silurian rocks of North-eastern Tenn and SW Va*	16	Wagner	C	81
Shenandoah				
Paleoenvironmental interpretation of a portion of the Conococheague Fm*	16	Fichter & Cord	JM	80
Devonian Clearville Siltstone stratigraphy and sedimentology*	16	Jolley	NC	80
Trace metal absorption by Mn, Fe oxide coatings on stream pebbles with their use in mineral exploration*	6, 12	Robinson	JM	81
Spotsylvania				
Tectonics of northeast Va. Piedmont*	10, 14, 16, 17	Pavrides	USGS-G	80
Stafford				
Structural analysis metamorphic rocks near Fredericksburg*	14, 17	Robinson	JM	81
Tectonics of northeast Va. Piedmont*	10, 14, 16, 17	Pavrides	USGS-G	80
Suffolk				
Cementation & diagenesis Yorktown Fm*	14	Benedict	W/M	81
Tazewell				
Analysis of dome & basin structures*	17	Armstrong	VPI	81
Virginia Beach				
Stratigraphy & paleoecology of the marine Pleistocene of SE Va*	13, 16	Spencer	OD	80
Responses of <u>Elphidium excavatium</u> to trace metal content, Lower Chesapeake Bay*	5, 6, 13	Spencer	OD	82
Washington				
Stratigraphy & paleontology Wildcat Valley Sandstone*	13, 14, 16	Kier	NC	81
Wise				
Stratigraphy & paleontology Wildcat Valley Sandstone*	13, 14, 16	Kier	NC	81
Possible paleoenvironmental equivalence of correlative Lower Silurian rocks of North-eastern Tenn and SW Va*	16	Wagner	C	81
York				
Cementation & diagenesis Yorktown Fm*	14	Benedict	W/M	81
Mineralogy and Ti content local clays for pottery analysis*	6, 11	Clement	W/M	81

QUADRANGLES

Numbers preceding quadrangle names are
keyed to the accompanying index map

QUADRANGLE & PROJECT	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
1. Marshall, Rectortown, Briery Branch, Fulks Run, Singers Glen Q	10, 14, 16, 17	Epenshade	USGS-G	80
2-4. Upper Ordovician, Lower Silurian sand- stones	14, 16	Roberts	JM	80
5. Bridgewater & Harrisonburg Q.	5, 10	Frischmann & Gathright	DMR	80
6. Elkton East & West Q.	5, 10	Gathright & Frischmann	DMR	IP
7. Massies Corner Q.	10	Halladay & Lukert	DMR	C
8. Massies Corner Q. Precambrian (?) pluton geochronology	11, 14	Mose	GM	81
9. Remington Q. Geology of Jurassic ba- salt flows north of the Rappahannock River, Culpeper Basin	8, 10, 17, 14	Awosika	GW	81
10. Occoquan Q, Occoquan pluton	11, 14	Mose	GM	80
11. Stafford Q. Structural analysis of meta- morphitic rocks near Fredericksburg	14, 17	Amenta	JM	85
12. Rollins Fork Q. Oak Grove stratigraphic Test	13, 16	Reinhardt	DMR	C
13. Mustoe Q., Systematics & paleoecology of Keyser Fm stromtoperoids	13	Holmes	A	80
14-15. Bath Alum, Burnsville, Mountain Grove, Sunrise, Warm Springs Q. Area geology of Muddy Run region central Bath Co.	10, 16	Whitehurst	NC	80
16. Mountain Grove, Warm Springs Q. Late Cenozoic history of Jackson River valley	7, 10, 16	Kite	JM	80
17. Mountain Grove, Warm Springs Q., Soils of Gathright Dam site	10	Sherwood	JM	80
18. Falling Springs Q., Late Cenozoic geo- logic history of Jackson River valley	7, 10, 16	Kite	JM	80
19. Falling Spring Q., Soils of Gathright Dam site	10	Sherwood	JM	80
20. Covington Q., Dolly Anne Rare II	6, 8, 10, 12	Lesure	USGS-G	81
21. Crozet Q., Freshwater Lake redox chemistry	5, 6, 11	Nordstrom	VA	80

QUADRANGLE & PROJECT	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
22. Mineral Q., Acid mine drainage: factors causing variation in creek chemistry	2, 5, 6, 11	Dagenhart	MW	80
23. Mineral Q., Fluid inclusion studies, Julia deposit	6, 12	Feiss & Holland	NC	80
24. Mineral Q., Rare earths in the Cofer ore	6, 11, 12	Feiss, Ussler, Spruill	NC	80
25. Mineral Q., Contrary Creek acid mine drainage	2, 5, 6, 9, 11	Nordstrom	VA	IP
26-27. Mineral, Pendleton Q., Massive sulfides in Va.	6, 11, 12, 14	Craig	VPI	IP
28. Lake Anna West, Lake Anna heavy metals	2, 5, 6, 9, 11	Nordstrom	VA	IP
29. Lakeside Village Q., Columbia (Hatcher) Granite geochronology	11, 14	Mose	GM	80
30. Andersonville, Willis Mtn. Q., Geol. study	5, 6, 8, 10, 12	Conley	DMR	80
31. Montpelier Q., Mineralogy & petrology Montpelier Anorthosites	11-14	Clement	W/M	81
32. Ashland, Hanover Academy Q.	5, 10	Weems	DMR	C
33. Glen Allen Q	5, 10	Goodwin	DMR	C
34. Fine Creek Mills Q., State Farm pluton geochronology	11, 14	Mose	GM	80
35. Bon Air Q	5, 10	Goodwin	DMR	C
36. Richmond Q, Building Stones	2, 5	Phillips	DMR	80
37. Richmond, Earth Sciences	2	Johnson	W/M	80
38. Clayville, Hallsboro, Mannboro, Winterpock Q.	5, 10	Goodwin	DMR	IP
39. Dutch Gap, Drewrys Bluff Q.	5, 10	Upchurch	DMR	81
40. Claremont, Gressitt, Norge, Surry, Toano Q	5, 10	Berquist	DMR	IP
41. Charles City Q	5, 10	Johnson	DMR	IP
42. Charles City Q, Habitat development field investigations	5, 6	Darby	OD	IP
43. Brandon Q	5, 10	Johnson	DMR	80
44-46. Newport News South, Norfolk North & South Q, Trace metals in estuarine & river sediments	6	Rule	OD	82
47-49. Norfolk North, Cape Henry, Little Creek Q, Shorelines erosion East Coast	4, 5, 7, 10, 15	Dolan	VA	81

QUADRANGLE & PROJECT	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
50-53. Cape Henry, Deep Creek, Kempsville, Princess Anne Q, Pleistocene depositional environments of Coastal Plain	2, 7, 10, 12, 13, 16	Darby & Whittecar	OD	83
54-58. Cape Henry, Kempsville, Little Creek, Princess Anne & Virginia Beach Q,	5, 10	Herbert	DMR	81
59-60. Deep Creek, Fentress Q. Groundwater salinity and landfill leachate in groundwater	6, 9	Rule	OD	82
61-63. Buena Vista, Glasgow, Snowden Q	10	Spencer	DMR	IP
64. Snowden Q, James River Face Wilderness	6, 8, 10, 12	Brown	USGS-G	80
65. Snowden Q, Analysis fault zones	10, 17	Spencer	W/L	81
66-68. Buchanan, Glasgow, Natural Bridge, Q, Analysis fault zones	10, 17	Spencer	W/L	81
69. Buchanan Q, Structure & geophysical cross sections of Blue Ridge and Valley	8, 10, 14, 17	Spencer	W/L	82
70. Montvale, Villamont Q,	5, 10	Henika	DMR	80
71. Daleville, Oriskany Q, Sedimentology and petrography Diamond Hill Conglomerate	14	Benedict	W/M	81
72. Daleville, Oriskany Q, Heavy mineral analysis Fincastle Congl.	14	Benedict	W/M	80
73. Newcastle Q, Saltville Thrust	17	House	VPI	81
74. Catawba Q, Computer analysis terrain	5, 7	Grender	VPI	IP
75. Roanoke, Stewartsville Q.	5, 10	Bartholomew	DMR	C
76. Bent Mtn. Garden City, Q.	5, 10	Bartholomew	DMR	IP
77. Craig Springs, Glenvar, Looney, Origin curvature juncture zone Central & Southern Appalachians	17	Reks	VPI	81
78. Lindside Q.	10	Bartholomew	DMR	81
79. Pearisburg Q, Analysis of dome & basin structures	17	Armstrong	VPI	81
80. Pearisburg Q.	5, 10	Bartholomew	DMR	81
81-83. Eggleston, Newport, Pearisburg, Q, Deformation within Martinsburg Fm.	17	Mullenax	VPI	81
84. Eggleston Q, Cleavage & thrusting of north end Southern Appalachians	17	Simon	VPI	81
85. Newport Q, Saltville Thrust	17	House	VPI	81
86. White Gate Q,	5, 10	Bartholomew	DMR	IP
87. Staffordsville Q,	5, 10	Bartholomew	DMR	81
88. Radford North Q,	5, 10	Bartholomew	DMR	80
89. Ironto Q.	5, 10	Bartholomew	DMR	IP

QUADRANGLE & PROJECT	TYPE OF RESEARCH	RESEARCHER	ADDRESS	STATUS
90. Long Spur Q,	5, 10	Bartholomew	DMR	IP
91-92. Dublin, Pulaski Q.,	10	Bartholomew	DMR	81
93. Pulaski Q., Cleavage & thrusting at north end Southern Appalachians	17	Simon	VPI	81
94. Riner Q	5, 10	Bartholomew	DMR	IP
95-96. Alum Ridge, Riner Q, Fries ductile deformation zone	17	Kaygi	VPI	80
97. Glade Hill, Rocky Mount Q.,	10	McCollum	DMR	C
98. Penhook Q,	10	Conley	DMR	IP
99. Penhook Q, Computer analysis terrain	5, 7	Greender	VPI	IP
100. Mtn. Valley Q,	10	Piepul	DMR	C
101. Callands, Sandy Level Q,	10	Berquist	DMR	C
102. Chatham, Pittsville Q.	10	Marr	DMR	C
103. Gretna & Spring Garden Q,	10	Conley	DMR	IP
104. Axton, Brosville, Draper, Whitmell Q.	10	Thayer & Van Price	DMR	C
105. Sanville Q.	10, 14, 16, 17	Keller & Mistra	T	83
106-107. Galax, Sylvatus Q, Ores of the Great Gossan Lead	6, 11, 12, 14	Craig	VPI	IP
108. Austinville Q, Geochemistry of Austinville-Ivanhoe district	6, 11, 12, 14	Craig	VPI	80
109. Galax Q, Structural & metamorphic geology of Ashe Fm	10, 11, 12, 14, 17	Tso	R	81
110-111. Anawalt, Amonata, Big A Mtn, Bramwell, Honaker, Jewell Ridge, Richlands Q, Geology & coal resources Central Appalachian Basin	3, 6, 16	Englund	USGS-G	83
112. Tiptop Q, Meramecian to Chesterian age conodonts	13, 16	Chaplio	MS	80
113. Tazewell South Q, Cleavage & thrusting at North End Southern Appalachians	17	Simon	VPI	81
114. Saltville Q,	5, 10	Bartholomew	DMR	IP
115. Glade Spring Q,	5, 10	Bartholomew	DMR	81
116-117. Abingdon, Shady Valley Q	14	Benedict	W/M	80
118-120. Abingdon, Holston Valley, Shady Valley, Wyndale Q	5, 10	Bartlett & Biggs	DMR	C
121. Appalachia, Benham Q.	3, 10	Henderson	DMR	IP

Virginia Division of Mineral Resources

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ABBREVIATIONS EXPLANATION

CONTACT ADDRESS

- A - Dept. Geology & Geography, Univ. Alabama, Tuscaloosa, AB 35486
- CI - Dept. Geology, Univ. Cincinnati, Cincinnati, OH 45221
- OD - Dept. Geophysical Sciences, Old Dominion Univ., Norfolk, VA 23508
- CL - Dept. Chemistry & Geology, Clemson Univ., Clemson, SC 29631
- DMR - Division Mineral Resources, PO Box 3667, Charlottesville, VA 22903
- GM - Dept. Chemistry & Geology, George Mason Univ., Fairfax, VA 22030
- GW - Dept. Geology, George Washington Univ., Washington, D. C. 20052
- JM - Geology Dept., James Madison Univ., Harrisonburg, VA 22807
- M - Maryland Geological Survey, Merryman Hall, John Hopkins, Univ., Baltimore, MD 21218
- MS - Dept. Physical Sciences, Morehead State Univ., Morehead, KY 40351
- MW - Dept. Geology, Mary Washington College, Fredericksburg, VA 22401
- NC - Dept. Geology, Univ. North Carolina, Chapel Hill, NC 27514
- R - Dept. Geology, Radford Univ., Radford, VA 24142
- T - Dept. Geological Sciences, Univ. Tennessee, Knoxville, TN 37916

- USGS-G - U. S. Geological Survey, Mail Stop 953, Reston, VA 22092
- USGS-W - U. S. Geological Survey, Water Resources Div., 200 W. Grace Street, Richmond, VA 23220
- VA - Dept. Environmental Sciences, Univ. Virginia Charlottesville, VA 22903
- VIMS - Va. Institute of Marine Science, Gloucester Point, VA 23062
- VPI - Dept. Geological Sciences, Va. Polytechnic Institute & State Univ., Blacksburg, VA 24061
- W/L - Dept. Geology, Washington & Lee Univ., Lexington, VA 24450
- W/M - Dept. Geology, College of William & Mary, Williamsburg, VA 23185

STATUS/ESTIMATED COMPLETION DATE

- C - Completed
- IP - In Progress

RESEARCH CATEGORY

- | | |
|---------------------------|-----------------------|
| 1. Data processing | 9. Hydrology |
| 2. Earth Science teaching | 10. Mapping |
| 3. Energy resources | 11. Mineralogy |
| 4. Engineering geology | 12. Mineral Resources |
| 5. Environmental geology | 13. Paleontologic |
| 6. Geochemical | 14. Petrology |
| 7. Geomorphic | 15. Remote sensing |
| 8. Geophysical | 16. Stratigraphic |
| | 17. Structural |